

IN THE SPECIFICATION

1. Please amend paragraphs [0007]-[0008] as follows:

[0007] The grid apparatus has a plurality of slender and long grid members fitted to a frame while being tensioned in the longitudinal direction (X-axis direction). The frame has a pair of support bars arranged parallel to each other, with ~~while bearing~~ a predetermined distance between them, and connected to the grid members, and elastic members attached to the ends of the support bars while being positioned between them.

[0008] The grid apparatus further has metallic members attached to the elastic members, and has ~~while bearing~~ a thermal expansion coefficient greater than that of the latter. The metallic members prevent the grid members from suffering thermal deformation during the heat treatment process.

2. Please amend paragraphs [0012]-[0014] as follows:

[0012] In order to solve such a problem, it has been suggested that the phosphors should be arranged in the direction of the long axis of the panel (or in the horizontal direction). For instance, such a cathode ray tube is disclosed ~~[[at]]~~ in Korean Patent Publication No. 91-10602 by Yim et al. for *Color Cathode Ray Tube*, U.S. Patent No. 5,099,169 by Vriens for *Shadow Mask Color Display Tube*, U.S. Patent No. 5,170,102 by Sluyterman et al. for *Picture Display Device*, and U.S. Patent No. 5,889,362 by Barten for

Color Display Tube having a Reduced Deflection Defocusing.

[0013] However, the above ~~Patents~~ patents are only related to a [[usual]] cathode ray tube ~~bearing~~ having no tension mask.

[0014] In order to prevent miss-landing of the electron beams with the cathode ray tube bearing a tension mask, various conditions, such as the arrangement pattern of phosphors, the tensioned state of the shadow mask and the shape of the panel, should be satisfied in an appropriate manner. In this way, the resulting flat cathode ray tube can [[bear]] have good picture quality.

3. Please amend paragraph [0017] as follows:

[0017] It is still another object of the present invention to provide a cathode ray tube that [[bears]] has a reasonable weight even with the enlarged flat panel.

4. Please amend paragraphs [0019]-[0022] as follows:

[0019] According to one aspect of the present invention, a color selection apparatus for the cathode ray tube includes a mask ~~bearing~~ having a short and a long axis, and a frame combined with the mask such that the mask is kept [[to be]] in a tensioned state. The mask is provided with a plurality of beam-guide holes. The mask is tensioned in the long axis direction while being supported by the frame.

[0020] The mask has a plurality of strips spaced apart from each other ~~[[with]]~~ by a predetermined distance, and real bridges disposed between the neighboring strips while being spaced apart from each other ~~[[with]]~~ by a predetermined distance. The beam-guide holes are formed with a plurality of slots longitudinally proceeding in the long axis direction while being partitioned by the real bridges.

[0021] Alternatively, the mask may have only a plurality of strips spaced apart from each other ~~[[with]]~~ by a predetermined distance. In this structure, the beam-guide holes are formed with single slots longitudinally proceeding in the long axis direction while being disposed between the neighboring strips.

[0022] According to another aspect of the present invention, the cathode ray tube includes a panel with a substantially flat outer surface and an inner curved surface. The inner curved surface of the panel has a phosphor screen. A funnel is connected to the panel while externally mounting a deflection unit for deflecting electron beams. A neck is connected to the funnel while internally mounting an electron gun for emitting the electron beams. A color selection apparatus is internally fitted to the panel such that the electron beams land on correct phosphors of the phosphor screen. The panel has an effective screen with a short and a long axis. The panel ~~[[bears]]~~ has a first thickness T_h at the ends of the effective screen in the long axis direction, and a second thickness T_v at the ends of the effective screen in the short axis direction. The second thickness T_v of the panel is established to be larger than the first thickness T_h of the panel. The color selection apparatus has a mask with a short and a long axis while ~~bearing~~ having a

plurality of beam-guide holes, and a frame combined with the mask such that the mask ~~keeps to being~~ is kept in a tensioned state. The mask is tensioned in the long axis direction while being supported by the frame.

5. Please amend paragraph [0024] as follows:

[0024] According to still another aspect of the present invention, the cathode ray tube includes a panel with a substantially flat outer surface and an inner curved surface. The inner curved surface of the panel has a phosphor screen. A funnel is connected to the panel while externally mounting a deflection unit for deflecting electron beams. A neck is connected to the funnel while internally mounting an electron gun for emitting the electron beams. A color selection apparatus is internally fitted to the panel such that the electron beams land on correct phosphors of the phosphor screen. The phosphor screen is shaped with a short and a long axis, and the phosphors are longitudinally arranged ~~[[at]]~~ on the phosphor screen in the long axis direction. The color selection apparatus has a mask with a plurality of beam-guide holes corresponding to the phosphors, and a frame combined with the mask such that the mask is kept ~~[[to be]]~~ tensioned in the long axis direction. The electron beams emitted from the electron gun are directed toward the phosphor screen in a line while being parallel to the short axis of the phosphor screen.

6. Please amend paragraph [0034] as follows:

[0034] Fig. 10 is a graph illustrating the stress distribution, and the horizontal and vertical wedge rates, of a panel for the cathode ray tube shown in Fig. 1;

7. Please amend paragraphs [0038]-[0039] as follows:

[0038] As shown in Fig. 11, the grid apparatus has a plurality of slender and long grid members 1 fitted to a frame 3 while being tensioned in the longitudinal direction (in the direction of X indicated in the drawing). The frame 3 has a pair of support bars 3a and 3b arranged parallel to each other, while ~~bearing~~ having a predetermined distance between them, and connected to the grid members 1, and elastic members 3c and 3d attached to the ends of the support bars 3a and 3b while being positioned between them.

[0039] The grid apparatus further has metallic members 5 and 7 attached to the elastic members 3c and 3d while ~~bearing~~ having a thermal expansion coefficient greater than that of the latter. The metallic members 5 and 7 prevent the grid members 1 from suffering thermal deformation during the heat treatment process.

8. Please amend paragraphs [0046]-[0047] as follows:

[0046] The panel 24 is substantially rectangular-shaped such that it ~~[[bears]]~~ has a long axis (indicated in the drawing by the X-X line)~~[[,]]~~ and a short axis (indicated by the Y-Y

line). The phosphor screen 22 ~~[[bears]]~~ has the same outline as the panel 24.

[0047] As shown in Fig. 2, the phosphor screen 22 includes R (red) ,G (green)~~[[,]]~~ and B (blue) phosphors 22a, 22b and 22c, respectively, spaced apart from each other ~~[[with]]~~ by a predetermined distance, and a black matrix 22d disposed between the neighboring phosphors. The R, G, B phosphors 22a, 22b and 22c, respectively, are longitudinally arranged at the inner surface of the panel 24 in the long axis (X-X) direction (or in the horizontal direction). The black matrix 22d also proceeds longitudinally in the long axis direction.

9. Please amend paragraphs [0049]-[0055] as follows:

[0049] The frame 38 has a pair of supporting members 38a and 38b as well as a pair of elastic members 38c and 38d. The supporting members 38a and 38b are formed in the shape of a capital letter L while ~~bearing~~ having a curved surface contacting the mask 36 such that the mask 36 can ~~[[bear]]~~ have a curvature corresponding to the inner curvature of the panel 24. The elastic members 38c and 38d are formed in the shape of a capital letter U. The shape of the supporting members 38a and 38b as well as that of the elastic members 38c and 38d may be varied while making other necessary variations.

[0050] In the fabrication process of the color selection apparatus, the supporting members 38a and 38b are arranged in parallel such that they are spaced apart from each other ~~[[with]]~~ by a predetermined distance, and the elastic members 38c and 38d are

welded to the same-sided ends of the supporting members 38a and 38b, respectively. The mask 36 is mounted ~~[[onto]]~~ on the supporting members 38a and 38b such that it is tensioned in the X'-X' direction.

[0051] The mask 36 is formed with a thin metal plate ~~bearing~~ having a thickness of 0.1 mm or more. As shown in the drawing, the mask 36 is formed with a plurality of strips 36a spaced apart from each other ~~[[with]]~~ by a predetermined distance, and a plurality of beam-guide holes 36b disposed between the neighboring strips 36a with a predetermined pitch.

[0052] The strips 36a are arranged in the X'-X' direction, and real bridges 36c are disposed between the beam-guide holes 36b in the X'-X' direction while interconnecting them. ~~[[The]]~~ Each beam-guide hole 36b is formed ~~[[with]]~~ as a rectangular-shaped slot.

[0053] The mask 36 is tensioned in the X'-X' direction, and the beam-guide ~~[[hole]]~~ holes 36b ~~[[is]]~~ are elongated in that direction such that the mask pattern is adapted to the pattern of the phosphor screen 22. It is preferable that the tensional strength of the mask 36 at the periphery thereof ~~should be~~ is established to be higher than that at the center thereof.

[0054] The beam-guide ~~[[hole]]~~ holes 36b of the mask 36 may be differentiated in shape. For instance, as shown in Fig. 4, the beam-guide hole 40a of the mask 40 may be a single slot placed between the neighboring strips 40b while being elongated in the X'-X' direction.

[0055] Furthermore, as shown in Fig. 5, it is possible ~~[[that]]~~ for the beam-guide hole

42a of the mask 42 ~~[[has]]~~ to have the same shape as the above-identified beam-guide hole 36b, and dummy bridges 42c are formed within the beam-guide hole 42a while being extended from the strips 42b in a body.

10. Please amend paragraphs [0059]-[0061] as follows:

[0059] It was confirmed through several experiments that, with the inventive cathode ray tube, the miss-landing of the electron beams on the periphery of the phosphor screen was reduced by 25% compared to the conventional cathode ray tube.

[0060] Furthermore, the electron gun 30 may be structured so that the electron beams thereof are directed toward the phosphor screen in a line while being parallel to the short axis of the phosphor screen. For that purpose, as shown in Fig. 6, cathodes 30a, 30b and 30c coated with electron beam emission materials are arranged in a line while not being parallel to the long axis direction, but ~~[[being]]~~ they are parallel to the short axis direction, thereby forming the plurality of electron beams. Of course, other components of the electron gun 30 should be controlled in an appropriate manner.

[0061] Meanwhile, as the cathode ray tube is formed with a completely flattened panel 24, it is liable to suffer from an explosion depending upon the distribution of the stresses applied to the panel 24. Furthermore, such a cathode ray tube may involve an increase in weight ~~while making an inconvenience carriage in~~ so as to make them inconvenient to carry. In order to avoid such problems, the panel 24 is structured to be well adapted to

the structure of the phosphor screen 22 and the color selection apparatus 34.

11. Please amend paragraph [0074] as follows:

[0074] While the present invention has been illustrated by the description of embodiments thereof, and while the embodiments have been described in considerable detail, it is not ~~the intention of the applicant~~ intended to restrict or in any way limit the scope of the appended claims to such detail. Additional advantages and modifications will readily appear to those skilled in the art. Therefore, the invention in its aspects is not limited to the specific details, representative apparatus and method, and illustrative examples shown and described. Accordingly, departures may be made from such details without departing from the spirit or scope of the ~~applicant's~~ general inventive concept.